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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **JOHN F. TURPIN, AMY POWELL and STEPHEN D. FOLLETT**

Filed: **August 22, 2001**

Examiner: **Thu Thao Havan**

Serial No.: **09/935,531**

Art Unit: **2672**

For: **ACTIVITY DISPLAY FOR MULTIPLE DATA  
CHANNELS OVER PERIOD OF TIME**

April 19, 2004

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**APPEAL BRIEF**

Dear Sir:

This is an appeal from the Examiner's rejection dated January 12, 2004 finally rejecting claims 1-3 over prior art.

**Real Party in Interest**

The real party in interest in this appeal is Applicants assignee, Tektronix, Inc., an Oregon corporation.

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**Related Appeals and Interferences**

There are no related appeals and interferences known to Appellants, Appellants' assignee or Appellants' legal representative which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**Status of Claims**

Claims 1-3, the claims appealed, are rejected over prior art, and claims 4-9 have been allowed.

**Status of Amendments**

No amendments were submitted subsequent to the Examiner's final rejection of claims 1-3.

**Summary of Invention**

The present invention is a method of displaying activity on multiple data channels over a period of time for a communication link in the form of a pseudo-three-dimensional graphic display having time as one axis, channel numbers or time slots along an orthogonal axis, and activity in the form of one's density as a fill shade for each rectangle defined by each time period and time slot combination. (Page 2, line 22 - page 3, line 4; Fig. 4)

**Issues**

Whether claims 1-3 are unpatentable as being obvious under 35 U.S.C. 103(a) over Smith et al ("Smith") in view of Thong.

**Grouping of Claims**

Claims 1-3 stand or fall together, with claim 1 being a representative claim.

**Argument**

35 U.S.C. 103(a) provides in pertinent part that “[A] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The U.S. Supreme Court has set forth the following factual queries to determine obviousness: (1) the scope and content of the prior art; (2) the differences between the prior art and rejected claims; and (3) the level of ordinary skill in the pertinent art. *Graham v. John Deere Co.* 148 USPQ 459, 467.

Smith discloses a quasi-three-dimensional display of a spectrum having frequency along one axis and time along an orthogonal axis, with amplitude being indicated by shading. (Fig. 2; column 4, lines 16-26) Each line of Smith represents a separate spectrum with different frequencies represented by different points along the line and the color of each point representing the amplitude of the signal at that frequency. (column 2, lines 4-8) Thong discloses a quasi-three-dimensional display of a spectrum having time along one axis and amplitude along an orthogonal axis, with shading within a rectangle defined by defined time intervals and max/min amplitudes within each time interval indicating average frequency during that time interval. (Fig. 4; column 2, lines 30-40) Thong teaches dividing time into intervals, so at best combining Thong with Smith results in dividing the time axis into time intervals encompassing multiple spectra to form rectangles that extend across the frequency span of the Smith display with the shading indicating average power for the multiple spectra during each time interval. This combination does not indicate channel activity of a communication link.

The display as recited in Appellants’ claim 1 has time periods along one axis and data channels of a communication link along an orthogonal axis. Neither

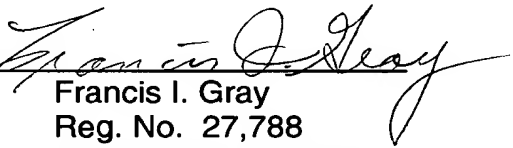
reference teaches data channels or time slots along one of the display axes, i.e., a time versus time graph. Neither reference teaches that the shading is representative of channel activity in the form of a one's density during each time period. The three dimensions addressed by the references are time, frequency and amplitude, while the present invention displays time, channel or time slot, and one's density. As indicated above, combining these references logically based upon what they teach does not produce the invention recited by Appellants in claim 1. Thus claim 1 is deemed to be allowable as being nonobvious to one of ordinary skill in the art at the time of Appellants' invention over Smith in view of Thong.

Appellants respectfully request that the Examiner's rejection of claims 1-3 be reversed, and that this case passed to issue.

An ORAL hearing is requested.

Respectfully submitted,

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**Appealed Claims**

1. An activity display for multiple data channels of a communication link over a period of time comprising a quasi-three-dimensional graphics display having time periods as a first axis, data channels as a second axis orthogonal to the first axis, and a shade within each rectangle defined by the time periods and data channels corresponding to a one's density for the data in the respective data channels during the respective time periods.
2. The activity display as recited in claim 1 wherein the shade is selected from a range of grey scale values.
3. The activity display as recited in claim 1 wherein the shade is selected from a plurality of color values.